



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,425	09/02/2004	Hideaki Kashiwara	51023-023	1224
20277	7590	12/14/2006	EXAMINER	
MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096			THOMAS, JAISON P	
			ART UNIT	PAPER NUMBER
			1751	

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/506,425

Applicant(s)

KASHIHARA ET AL.

Examiner

Jaison P. Thomas

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 27 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

1. This office action is responsive to applicant's remarks filed 9/27/2006.
2. Claims 1, 4, 5 are amended.
3. The rejection of Claim 5 under 35 USC 112, second paragraph, as being indefinite is withdrawn in view of applicant's amendments.
4. The rejection of Claims 1-7 under 35 USC 103(a) as being unpatentable over Naoki et al. (JP 2000-124662) in view of Kang et al. (JP 08-273431) is withdrawn in view of applicant's arguments.
5. Claims 1-17 stand rejected under 35 USC 102(b) as anticipated by or, in the alternative, under 35 USC 103(a) as being unpatentable over Jin et al. (US Patent 4923739).

### ***Response to Arguments***

6. Applicant's arguments filed 9/27/2006 have been considered and are not considered and are not found persuasive with respect to the rejection of Claims 1-17 under 35 USC 102(b) as being anticipated by Jin et al. (US Patent 4923739).

Applicant argues that the particles disclosed in Jin would be able to "cope with narrowing the pitch" of the electrodes due to the particle sizes disclosed in Jin. Further, applicant argues that, since Jin requires a binder to be intervened between the particles, there is a resulting deterioration of the conductivity in thickness direction of electrode. Also, applicant argues that, with respect to the L/D ratio, the examiner has not established that the ratio is a result effective variable known to persons skilled in the art.

Art Unit: 1751

Finally, the applicant argues that the art does not disclose the use of a reducing agent as claimed in Claim 4 or, more specifically, a trivalent titanium compound as required by Claim 5.

With respect to the "narrowing the pitch" argument, the examiner respectfully submits that the applicant has made a conclusive statement without any additional supporting evidence showing that the statement is true. Further, since both Jin and applicant's claimed invention are using similar materials (i.e. ferromagnetic particles which are distributed in a curable resin) processed in a similar fashion, the examiner respectfully submits that the composition of Jin would inherent possess said property of being able to cope with "narrowing the pitch" of the electrodes.

With respect "binder" argument discussed above, the examiner notes that applicant's specification discloses a similar binder (i.e. thermoplastic or curable resins) that is used in the practice of the applicant's invention (see Specification, pg. 3, lines 1-6) thus examiner respectfully submits that Jin's composition would inherently possess conductivity values on par with those of the applicant's invention since, as mentioned above, the Jin invention and applicant's claimed invention use similar materials which are processed in similar fashions. Further, the examiner respectfully notes, as above, the applicant makes a conclusive statement about the deterioration of conductivity without showing any additional supporting evidence supporting such a statement.

With respect to the "L/D ratio" argument, the examiner notes that by merely viewing the figures illustrating depicting the physical configuration of the particles in the binder (e.g. Figure 1 and Figure 3) it is clear that the L/D ratio of these chains are

Art Unit: 1751

greater than 3 as required by Claim 1 of applicant's invention. Thus while Jin does not explicitly disclose an L/D ratio of greater than 3, the reference still implicitly discloses this value.

Finally, with respect to the "reducing agent" argument, the examiner respectfully refers the applicant to page 7 of the Office Action dated 6/28/2006 in regards to the case law of *In re Best*, *In re Spada* and *Titanium Metals Corp.* Particularly, that once a case has been established that the prior art discloses identical or substantially identical products in structure or composition produced by identical or substantially identical processes, the case can be rebutted by a showing of evidence that the prior art products do not necessarily possess the characteristics of the claimed invention. Here, the examiner respectfully notes that no evidence has been provided showing the differences between the claimed invention and the prior art products.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 1751

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaison P. Thomas whose telephone number is (571) 272-8917. The examiner can normally be reached on Mon-Fri 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jaison Thomas  
Examiner  
11/24/2006

  
Mark Kopec  
Primary Examiner